

A. AMENDMENTS WITHOUT MARKUP

In the Specification

A₁ Figure 1 depicts a pictorial representation of a distributed data processing system in which the present invention may be implemented and is intended as an example, and not as an architectural limitation, for the processes of the present invention. Distributed data processing system **100** is a network of computers which contains a network **102**, which is the medium used to provide communications links between various devices and computers connected together within distributed data processing system **100**. Network **102** may include permanent connections, such as wire or fiber optic cables, or temporary connections made through telephone connections, personal computers, or network computers. Distributed data processing system **100** may include additional servers, clients, and other devices not shown. In the depicted example, distributed data processing system **100** is the Internet with network **102** representing a worldwide collection of networks and gateways that use the TCP/IP suite of protocols to communicate with one another. Computers **104**, **106**, **108**, **110**, and **112** are all connected to network **102**. Distributed data processing system **100** may also be implemented as a number of different types of networks, such as for example, an intranet, a local area network (LAN), or a wide area network (WAN).

Figure 2 depicts computer **200**. Although the depicted embodiment involves a personal computer, a preferred embodiment of the present invention may be implemented in other types of data processing systems. An exemplary hardware arrangement for computer **200** follows. Keyboard **222** and display **223** are connected to system bus **210**. Read only memory (ROM) **230** contains, typically, boot strap routines and a Basic Input/Output System (BIOS) utilized to initialize Central Processing Unit (CPU) **220** at start up. Random Access Memory (RAM) **240**

represents the main memory utilized for processing data. Drive controller **250** interfaces one or more disk type drives such as floppy disk drive **252**, CD ROM **254** and hard disk drive **256**. The number and type of drives utilized with a particular system will vary depending upon user requirements. A network interface **260** permits communications to be sent to and received from a network. Communications port **270** may be utilized for a dial up connection to one or more networks **280** while network interface **260** is a dedicated interface to a particular network. Programs for controlling the apparatus shown in Fig. 2 are typically stored on a disk drive and then loaded into RAM for execution during the start-up of the computer.

Figure 3 depicts the appearance of spotlight cursor **320**. Spotlight cursor **320** has light **314**, cursor **311** and "c" **330**. Cursor **311** has tip **312**. When referring to the coordinates of the cursor, the coordinates are those of tip **312**. The tip is defined as the most forward point of the arrow displayed as the cursor. Persons skilled in the art are aware that any other point on the cursor could be chosen. Tip **312** defines the center of light **314**. Light **314** is an area defined by a circle with circumference "c" **330**. Light **314** has radius "r" (not shown) which is the straight line distance from tip **312** to "c" **330**. Circumference $A_{c@}$ may appear as a sharp line in contrast to screen **310**, a broken line in contrast to screen **310**, a soft line in contrast to screen **310** or a fuzzy line blending with screen **310**; however, no matter what appearance is given to the circumference, "c" will be defined mathematically in relation to radius "r" for the purpose of spotlight cursor **320**. As shown in Fig. 3, spotlight cursor **320** has not caused any secondary content to appear on screen **310**. Screen **310** has "Invert" checkbox **340**, "Mirror" checkbox **350** and "Print File Information" checkbox **360**.

Figure 4 depicts screen **310** with spotlight cursor **320** in a new position. The user has moved cursor **311** to the new position. As cursor **311** moved, light **314**, with "c" **330** and center

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coinciding with tip **312** of cursor **311**, also moved. Secondary content information icons have appeared. Specifically “Invert” checkbox information icon **410** has appeared adjacent to “Invert” checkbox **340**, “Mirror” checkbox information icon **420** has appeared adjacent to “Mirror” checkbox **350**, and “Print file information” checkbox information icon **430** has appeared adjacent to “Print file information” checkbox **360**. As will be explained in further detail below the appearance of “Invert” checkbox information icon **410**, “Mirror” checkbox information icon **420** and “Print file information” checkbox information icon **430** were caused by covering with “c” of spotlight cursor **320**.

As used herein, “cover” means the act of a point on a secondary content being contacted by a point on “c” (where “c” is the circumference of a circle with radius “r”) or being contained within the boundary of “c” or the coordinates of a point on “c” coinciding or equaling coordinates of a point on a secondary control, or a point on the boundary of a pre-defined zone containing one or more secondary contents. As used herein, secondary content means text, icons, images or controls. The introduction of secondary content in a GUI is done by the application programmer, taking advantage of the capability and availability of the spotlight cursor.

The method for using the spotlight cursor is as follows. The program obtains the x,y coordinates of the cursor. Next, the program applies the pre-selected radius to define a circle of circumference “c” with origin at x,y (tip **312** of Fig. 3) and radius “r”. Next the program determines whether or not there are any secondary contents that are within the circumference of the circle. If there is a secondary content within circumference “c” then the secondary content will be activated and revealed in the primary layer of the GUI. If there are no secondary contents within the circumference “c” of the circle, then the program does nothing. The program

cycles each time the cursor moves (each time the cursor coordinates change). The program may be incorporated into an operating system, an application, or the program may be a plug-in for adaptation to a pre-existing program. Once the spotlight feature is active, no further action is needed on the user's part

Figure 5 depicts the flow chart of program 500 for using spotlight cursor 320. Cursor movement activates program 500. First, program 500 starts (510) and determines whether or not the cursor has moved (520). If the cursor has not moved, program 500 goes to step 590. If the cursor has moved, program 500 determines whether or not the spotlight cursor is on (530). If the spotlight cursor is not turned on, program 500 will proceed to step 590. If the spotlight cursor is turned on, program 500 will proceed to obtain the coordinates of the cursor (540). Next, program 500 will use the cursor coordinates and "r" to calculate the location of "c", where "c" is the circumference of a circle of radius "r" (550). The value of "r" will be set by a configuration program, a default value, or a setting selected by the programmer of the application. Next, program 500 will determine whether or not "c" has covered secondary content (560). If "c" has not covered a secondary content, program 500 hides secondary content that has been previously displayed (570) and goes to step 590. If "c" has covered a secondary content, the secondary content will be displayed (580). The secondary content will be displayed according to a method of appearance chosen in a configuration program. Program 500 then stops (590).

Figure 6 depicts a flow chart for program 600 for configuration of the spotlight cursor. Program 600 begins (610) and displays a menu (612). First, program 600 determines whether or not the secondary content is to be displayed (614). If the user selects "no", program 600 will set "r" = 0 (616) and end (656). By setting "r" = 0, the spotlight cursor is rendered inoperable as there will be no "c" to cover secondary content. If secondary content is to be displayed, program

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600 will determine whether or not "r" has been selected (618). If the user has not entered "r", program 600 will set "r" to a default value (620) and enter the default value for "r" (622). If the user has set "r", program 600 will enter the value of "r" (622). Program 600 will determine whether or not the user has set the intensity (624). If "r" is set to a minimum value "1", then spotlight cursor 320 may not be visible at tip 312 of cursor 311. However, spotlight cursor 320 will have a minimum "c" to effect display of secondary content. The intensity is the brightness of the circle of light within circumference "c". If the user has not set the intensity, program 600 will select the default intensity (626) and program 600 will go to step 628 and enter the value for the intensity (628). If the user sets the intensity, program 600 will go to step 628 and enter the value for the intensity (628). Next, program 600 will determine whether or not a color has been selected for the area inside "c" (630). If the user does not select a color for the area inside "c", program 600 will set the color to the default color (632) and program 600 will go to step 634 and enter the color (634). If the user selects a color for the area inside "c", program 600 will go to step 634 and enter the color (634). Next, program 600 will determine whether a color has been selected for "c" (636). If a color has not been selected for "c", program 600 will select the default color for "c" (638) and program 600 will go to step 640 and enter the color (640). If the user selects a color for "c" program 600 will go to step 640 and enter the color (640). Next, program 600 will determine whether the configuration of "c" has been selected (642). If the user has not selected a configuration for "c", program 600 will set the configuration of "c" to the default configuration (644) and program 600 will proceed to step 646 and enter the configuration (646). If the user has selected a configuration for "c", then program 600 will enter the configuration for "c" (646). Next, program 600 will determine the mode of appearance of secondary controls (648). If the user selected a mode of appearance for secondary controls,

program 600 will enter the mode of appearance of secondary controls (652). If the user has not selected a mode of appearance for secondary controls, then program 600 will go to program 700 shown on Figure 7 via connection 650.

A1 Referring to Fig. 7, program 700 continues from program 600 via connection 650 and will determine whether or not "gradual appearance" has been selected (710). If "gradual appearance" has been selected, program 700 will set the appearance of secondary content for "gradual appearance" (720) and go to step 770 which will set the display to reveal appearance when covered by "c" (770). If the user has not selected "gradual" then program 700 will determine whether or not the user has selected "all at once" (730). If the user has selected "all at once" then program 700 will set appearance for "all at once" (740) and program 700 will go to step 770 which will set the computer to reveal secondary content when covered by "c" (770). Next, program 700 will determine, whether or not the user has selected "zone" (750). If the user has selected "zone", then program 700 will set the appearance for the zone (760) and proceed to step 770. If the user has not selected "zone", then program 700 will go to step 770 which will cause the computer to reveal secondary content when covered by "c". Then program 700 will return to program 600 via connector 654. Referring again to Fig. 6, program 600 will then enter the secondary definition (652), and end (656).

Figure 8 depicts circumference "c" gradually revealing a secondary content item. Spotlight cursor 320 has circumference 330 and light 314. Secondary content item 850 has outer edge 860. When circumference 330 covers a point on outer edge 860, secondary content item 850 will start to be displayed. In figure 8, circumference 330 has passed over outer edge 860 and intersecting area 840 is revealed while remainder area 842 is not displayed. As circumference

330 advances and covers additional points of secondary item **850** intersecting area **840** will grow and remainder area **842** will decrease.

Figure 9 depicts circumference "c" revealing secondary content item **950** all at once. Spotlight cursor **320** has circumference **330** and light **314**. Secondary content item **950** has outer edge **960**. When circumference **330** covers a point on outer edge **960**, secondary content item **950** will be fully displayed. There will be no intersecting area or remainder area. No matter what point on outer edge **960** of secondary content item **950** is covered by circumference **330**, all of secondary content item **950** will be displayed.

Figure 10 depicts circumference "c" revealing a group of secondary content by covering a point in the predetermined zone. Spotlight cursor **320** has circumference **330** and light **314**. Secondary content items **1050**, **1052** and **1054** are positioned within pre-defined zone boundary **1060**. When circumference **330** covers a point on zone boundary **1060**, all three secondary content items **1050**, **1052** and **1054** will appear fully displayed at the same time.

The advantages provided by the present invention should be apparent in light of the detailed description provided above. The description of the present invention has been presented for purposes of illustration and description, but is not limited to be exhaustive or limited to the invention in the form disclosed. Many modifications and variations will be apparent to those of ordinary skill in the art. The embodiment was chosen and described in order to best explain the principles of the invention the practical application and to enable others of ordinary skill in the art to understand the invention for various embodiments with various modifications as are suited to the particular use contemplated.